



Ford Motor Company

DEC 19 2007

Kentuck Truck Plant
3001 Chamberlain Lane
Louisville, Kentucky 40241

December 17, 2007

Sara Beard
Kentucky Department for Environmental Protection
Division of Water - KPDES Branch
14 Reilly Road
Frankfort, KY 40601-1189

Subject: Ford Motor Company - Kentucky Truck Plant
KPDES Permit No. KY0097454

Dear Ms. Beard:

During the storm water inspection and permit application review meeting on September 21, 2007, you discussed providing the Ford Motor Company Kentucky Truck Plant (KTP) with a non-conventional storm water permit with in-stream monitoring permit conditions in lieu of traditional outfall monitoring requirements. KTP has completed sampling at up-stream and down-stream locations in Hite Creek. The sampling results are included for your review. Also attached is an updated Form F which replaces the Form F previously submitted on March 28, 2007.

KTP agrees that a non-conventional storm water permit may provide the plant with valuable operating flexibility provided the draft permit proposed by the Kentucky Department for Environmental Protection (KYDEP) does not contain unnecessary monitoring, sampling and effluent limitations. While KTP recognizes the agency's desire to obtain analytical results that represent various conditions and seasons, the total number of sampling events required to demonstrate compliance and manage risk from off-site sources increases considerably when the existing quarterly and annual monitoring frequency is increased to monthly as mentioned during the above-referenced meeting (even though the monitoring points decreases substantially).

KTP appreciates the opportunity provided by the KYDEP to reduce the number of sampling points and address sampling concerns related to qualifying rainfall events. However, the non-traditional permit proposed should not impose more rigorous requirements than the existing conventional permit. Therefore, this style of permit would be preferred over a conventional permit as long as the monitoring frequency is at most quarterly..

Further, metals sampling should only be required for metals that are known to be present at the facility and that could potentially impact stream quality. Therefore, metals sampling should be limited to zinc consistent with the existing conventional permit. Historical KPDES analytical results demonstrate that copper concentrations from the conventional outfall locations are consistently at or below laboratory detection limits. Additionally, the in-stream sampling results support the removal of copper monitoring requirements.

Historical sampling data indicates that KTP's Best Management Practices (BMPs) are effective in minimizing discharge of regulated pollutants into the receiving stream. Therefore, KTP proposes the following sampling and analysis requirements for the reissued KPDES Permit:

<u>Location</u>	<u>Frequency</u>	<u>Parameters</u>	<u>Limits</u>
Upstream of KTP Outfalls	Quarterly	pH, Flow, TSS, Hardness, O&G, Zinc	Report
Downstream of KTP Outfalls	Quarterly	Parameters pH, Flow, TSS, Hardness, O&G, Zinc	Limits Report

KTP looks forward to working with you to develop a non-conventional storm water permit that will provide the plant with valuable operating flexibility without increasing the number of sampling events, while maintaining compliance with storm water discharge requirements. If you have any questions regarding these comments, please contact Barbara Hall, KTP Environmental Engineer, at 502-429-2797 or Danielle Fenbert, Vehicle Operations Environmental Engineer, at 313-805-5289.

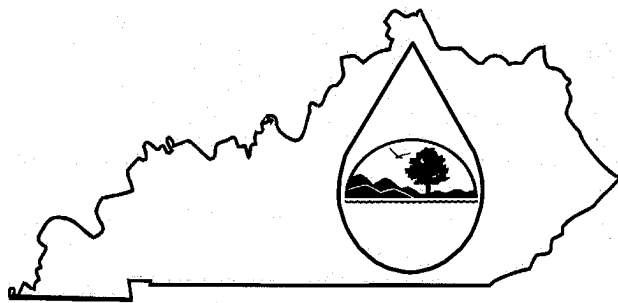
Sincerely,



Todd Bryant
Plant Manager

cc: Larry Sowder, Kentucky Department for Environmental Protection
Danielle Fenbert, Ford Motor Company Facilities & Environmental Engineering
Mike Stowell, Ford Motor Company Environmental Quality Office
Heidi McKenzie, Ford Motor Company Environmental Quality Office

KPDES FORM F



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

DEC 19 2007

PERMIT APPLICATION

A complete application consists of this form and Form 1.

For additional information, Contact KPDES Branch, (502) 564-3410.

I. OUTFALL LOCATION				AGENCY USE										
---------------------	--	--	--	------------	--	--	--	--	--	--	--	--	--	--

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and name the receiving water.

A. Outfall Number	B. Latitude			C. Longitude			D. Receiving Water (name)
022 Upstream of KTP **	38	17	39	85	31	11	Hite Creek
023 Downstream of KTP outfalls **	38	18	00	85	32	00	Hite Creek
** Note 022 and 023 are not KTP outfall. They are upstream and downstream sampling locations.							

II. IMPROVEMENTS			
------------------	--	--	--

A. Are you now required by any federal, state, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls No. Source of Discharge	3. Brief Description of Project	4. Final Compliance Date a. req. b. proj.
N/A			

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. SITE DRAINAGE MAP

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility. The map includes: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each know past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

See Appendix B for Map.

IV. NARRATIVE DESCRIPTION OF POLLUTANT SOURCES

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
----------------	--	------------------------------------	----------------	--	------------------------------------

Not Applicable, since sampling points are within Hite Creek, and are not "Outfalls" comprised exclusively of storm water runoff. Appendix C contains information for Outfalls for consistency purposes.

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

See attached Appendix D for this information


C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table F-1
----------------	-----------	---------------------------

See attached Appendix E for this information.

V. NON-STORM WATER DISCHARGES

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-storm water discharges, and that all non-storm water discharges from these outfall(s) are identified in either an accompanying Form C or Form SC application for the outfall.

Name and Official Title (type or print) Mr. Todd Bryant, Plant Manager	Signature 	Date Signed 12/17/07
--	--	--------------------------------

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Intermittent non-storm water discharges (non-contact cooling water from pumps associated with the KTP's emergency fire water protection system) which occur annually from Outfalls 001, 003 and 021. Additional discharges occur periodically from the fire protection water system at KTP. Dry weather flow at Outfall 001 is attributed to groundwater infiltration and occasional city water tank overflow, also described on short form C. Analysis of accurate schematics on May 1, 1998 did not identify non-storm water conveyance connections to the storm water drainage system other than that associated with Outfall 001.

VI. SIGNIFICANT LEAKS OR SPILLS

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

See attached Appendix F for this information

VII. DISCHARGE INFORMATION

A,B,C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables F-1, F-2, and F-3 are included on separate pages.

E: Potential discharges not covered by analysis - is any toxic pollutant listed in Table F-2, F-3, or F-4, a substance which you currently use or manufacture as an intermediate or final product or by product.

☒ Yes (list all such pollutants below) ☐ No (go to Section IX)

Aluminum	Cobalt Compound	Naphthalene
Antimony Compound	Di-2-Ethylhexyl Phthalate	Nickel
Arsenic Compound	Di-N-Octyl Phthalate	Nickel Compound
Barium Compound	Manganese	Tin Compound
Benzene	Manganese Compound	Titanium Compound
Chromium Compound	Molybdenum Compound	Toluene

VIII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such results below) ☒ No (go to Section IX)

IX. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address and telephone number of, and pollutants analyzed by each such laboratory or firm below; use additional sheets if necessary).

☐ No (go to Section IX)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Microbac Laboratories, Inc.	3323 Gilmore Industrial Blvd. Louisville, KY 40213	502-962-6400	Total Settleable Solids; Total Suspended Solids; Total Oil and Grease; Total Recoverable Metals (Aluminum, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Nickel, Silver, Zinc).

X. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

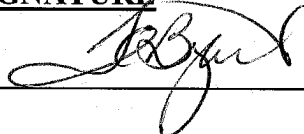
NAME & OFFICIAL TITLE (type or print)

Mr. Todd Bryant, Plant Manager

AREA CODE AND PHONE NO.

(502) 429-2211

SIGNATURE



DATE SIGNED

12/17/07

VII. DISCHARGE INFORMATION	Sampling Location 022 (Upstream Hite Creek)
-----------------------------------	--

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
Oil and Grease	<5 mg/L	N/A	<5 mg/L	N/A	3	
Biological Oxygen Demand BOD ₅	N/A	N/A	N/A	N/A	N/A	
Chemical Oxygen Demand (COD)	N/A	N/A	N/A	N/A	N/A	
Total Suspended Solids (TSS)	7 mg/L	N/A	5.7 mg/L	N/A	3	
Total Kjeldahl Nitrogen	N/A	N/A	N/A	N/A	N/A	
Nitrate plus Nitrite Nitrogen	N/A	N/A	N/A	N/A	N/A	
Total Phosphorus	N/A	N/A	N/A	N/A	N/A	
pH	N/A	N/A	N/A	N/A	N/A	

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's KPDES permit for its process wastewater (if the facility is operating under an existing KPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
N/A						

Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
Aluminum*	<1 mg/L	N/A	<1 mg/L	N/A	3	
Arsenic*	<0.05 mg/L	N/A	<0.05 mg/L	N/A	3	
Cadmium*	<0.01 mg/L	N/A	<0.01 mg/L	N/A	3	
Chromium*	<0.01 mg/L	N/A	<0.01 mg/L	N/A	3	
Copper*	<0.01 mg/L	N/A	<0.01 mg/L	N/A	3	
Iron	0.5 mg/L	N/A	0.41 mg/L	N/A	3	
	The predominant source of iron in the runoff from the facility is the soil. Appendix I contains an evaluation to justify this contention.					
Lead*	<0.01 mg/L	N/A	<0.01 mg/L	N/A	3	
Manganese*	1.60 mg/L	N/A	1.06 mg/L	N/A	3	
Nickel*	<0.01 mg/L	N/A	<0.01 mg/L	N/A	3	
Silver*	<0.01 mg/L	N/A	<0.01 mg/L	N/A	3	
Zinc	0.04 mg/L	N/A	0.02 mg/L	N/A	3	
Settleable Solids	<0.1 mg/L/hr	N/A	<0.1 mg/L/hr	N/A	3	

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gal/min or specify units)	6. Total flow from rain event (gallons or specify units)
November 9, 12, 13 and , 2007	N/A	N/A	N/A	N/A	N/A

7. Provide a description of the method of flow measurement or estimate.

Flow not measured, as not required by KPDES Branch for this unique application.

VII. DISCHARGE INFORMATION			Outfall 022 (Hite-In)			
Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.						
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
Oil and Grease	<5 mg/L	N/A	<5 mg/L	N/A	4	
Biological Oxygen Demand BOD ₅	N/A	N/A	N/A	N/A	N/A	
Chemical Oxygen Demand (COD)	N/A	N/A	N/A	N/A	N/A	
Total Suspended Solids (TSS)	7 mg/L	N/A	5.7 mg/L	N/A	4	
Total Kjeldahl Nitrogen	N/A	N/A	N/A	N/A	N/A	
Nitrate plus Nitrite Nitrogen	N/A	N/A	N/A	N/A	N/A	
Total Phosphorus	N/A	N/A	N/A	N/A	N/A	
pH	N/A	N/A	N/A	N/A	N/A	
Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's KPDES permit for its process wastewater (if the facility is operating under an existing KPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.						
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
N/A						
Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.						
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
Aluminum	<1 mg/L	N/A	<1 mg/L	N/A	4	
Arsenic	<0.05 mg/L	N/A	<0.05 mg/L	N/A	4	
Cadmium	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Chromium	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Copper	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Iron	0.5 mg/L	N/A	0.37 mg/L	N/A	4	
	The predominant source of iron in the runoff from the facility is the soil. Appendix I contains an evaluation to justify this contention.					
Lead	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Manganese	1.60 mg/L	N/A	1.01 mg/L	N/A	4	
Nickel	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Silver	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Zinc	0.04 mg/L	N/A	0.02 mg/L	N/A	4	
Settleable Solids	<0.1 mg/L/hr	N/A	<0.1 mg/L/hr	N/A	4	
Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.						
1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gal/min or specify units)	6. Total flow from rain event (gallons or specify units)	
November 9, 12, 13 and 19, 2007	N/A	N/A	N/A	N/A	N/A	
7. Provide a description of the method of flow measurement or estimate.						
Flow not measured, as not required by KPDES Branch for this unique application.						

VII. DISCHARGE INFORMATION			Outfall 023 (Hite-Out)			
Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.						
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
Oil and Grease	<5 mg/L	N/A	<5 mg/L	N/A	4	
Biological Oxygen Demand BOD ₅	N/A	N/A	N/A	N/A	N/A	
Chemical Oxygen Demand (COD)	N/A	N/A	N/A	N/A	N/A	
Total Suspended Solids (TSS)	18 mg/L	N/A	9.3 mg/L	N/A	4	
Total Kjeldahl Nitrogen	N/A	N/A	N/A	N/A	N/A	
Nitrate plus Nitrite Nitrogen	N/A	N/A	N/A	N/A	N/A	
Total Phosphorus	N/A	N/A	N/A	N/A	N/A	
pH	N/A	N/A	N/A	N/A	N/A	
Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's KPDES permit for its process wastewater (if the facility is operating under an existing KPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.						
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
N/A						
Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.						
Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1 st 20 Minutes	Flow-weighted Composite		
Aluminum	<1 mg/L	N/A	<1 mg/L	N/A	4	
Arsenic	<0.05 mg/L	N/A	<0.05 mg/L	N/A	4	
Cadmium	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Chromium	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Copper	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Iron	0.8 mg/L	N/A	0.40 mg/L	N/A	4	
	The predominant source of iron in the runoff from the facility is the soil. Appendix I contains an evaluation to justify this contention.					
Lead	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Manganese	0.09 mg/L	N/A	0.04 mg/L	N/A	4	
Nickel	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Silver	<0.01 mg/L	N/A	<0.01 mg/L	N/A	4	
Zinc	0.06 mg/L	N/A	0.03 mg/L	N/A	4	
Settleable Solids	<0.1 mg/L/hr	N/A	<0.1 mg/L/hr	N/A	4	
Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.						
1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gal/min or specify units)	6. Total flow from rain event (gallons or specify units)	
November 9, 12, 13 and 19, 2007	N/A	N/A	N/A	N/A	N/A	
7. Provide a description of the method of flow measurement or estimate.						
Flow not measured, as not required by KPDES Branch for this unique application.						